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(54)

Redundant backplane interconnect for electronic devices

(57)

Apparatus for connecting a plurality of electronic devices with corresponding backplanes to improve reliability of accessing the devices are described. In one embodiment, the apparatus includes first and second backplanes (110, 120) having connectors (112-116, 122-126) for at least one device. A device (130) having a plurality of data paths has a first data path (140) coupled to a data path connector (112) of the first back-

plane. A second data path (150) of the device is coupled to a data path connector (122) of the second backplane. Alternatively, a γ -adapter (240) is used to connect a single data path device (230) to data path connectors (212, 222) of distinct backplanes (210, 220). In various embodiments, the backplanes (210, 220) lie in a common plane. Alternatively, the backplanes lie in distinct parallel planes (310, 320).

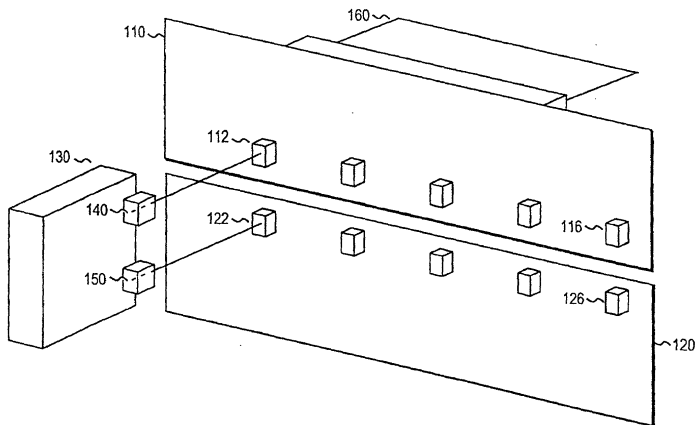


FIG. 1



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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	WO 00 22711 A (AT MOTION INC) 20 April 2000 (2000-04-20) * page 7, line 26 - page 9, line 2; figure 3 *	1	G06F11/20 G06F13/40
X	EP 0 726 528 A (IBM) 14 August 1996 (1996-08-14) * the whole document *	1	
A	EP 1 001 345 A (HEWLETT PACKARD CO) 17 May 2000 (2000-05-17) * page 20, line 1 - line 47; figure 14 *	1-7	
A	US 5 296 748 A (WICKLUND DENTON G ET AL) 22 March 1994 (1994-03-22) * figure 4 *	1-7	
A	US 5 547 386 A (FREDBERG SVEN T) 20 August 1996 (1996-08-20) * column 7, line 58 - column 9, line 58; figure 2 *	1-7	
A	US 6 006 341 A (KAMINSKI KRZYSZTOF) 21 December 1999 (1999-12-21)		
A	US 5 999 527 A (PETERSEN LARS-GOERAB) 7 December 1999 (1999-12-07)		
A	US 5 386 535 A (CARTEAU DANIEL) 31 January 1995 (1995-01-31)		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 20 December 2002	Examiner Absalom, R
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

20-12-2002

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0022711 A	20-04-2000	US 6397345 B1	28-05-2002
		AU 6419599 A	01-05-2000
		CA 2346373 A1	20-04-2000
		EP 1119892 A1	01-08-2001
		JP 2002527840 T	27-08-2002
		WO 0022711 A1	20-04-2000
EP 0726528 A	14-08-1996	US 5603044 A	11-02-1997
		DE 69620497 D1	16-05-2002
		EP 0726528 A1	14-08-1996
		JP 3301053 B2	15-07-2002
		JP 8263462 A	11-10-1996
EP 1001345 A	17-05-2000	US 6477139 B1	05-11-2002
		EP 1001345 A2	17-05-2000
		JP 2000187622 A	04-07-2000
US 5296748 A	22-03-1994	NONE	
US 5547386 A	20-08-1996	SE 501791 C2	15-05-1995
		AU 677104 B2	10-04-1997
		AU 7792594 A	10-04-1995
		CN 1134218 A , B	23-10-1996
		DE 69416146 D1	04-03-1999
		DE 69416146 T2	02-06-1999
		EP 0720812 A1	10-07-1996
		ES 2126150 T3	16-03-1999
		SE 9303105 A	24-03-1995
		WO 9508912 A1	30-03-1995
US 6006341 A	21-12-1999	SE 517194 C2	07-05-2002
		AU 4358496 A	24-07-1996
		EP 0800675 A1	15-10-1997
		JP 10510077 T	29-09-1998
		SE 9404556 A	30-06-1996
		WO 9621188 A1	11-07-1996
US 5999527 A	07-12-1999	AU 1680097 A	22-08-1997
		CA 2243695 A1	07-08-1997
		EP 0878111 A1	18-11-1998
		JP 2000504175 T	04-04-2000
		SE 9600388 A	03-08-1997
		WO 9728667 A1	07-08-1997
US 5386535 A	31-01-1995	FR 2655464 A1	07-06-1991
		DE 69021696 D1	21-09-1995

EPO FORM P0459

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 02 25 4239

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on

The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

20-12-2002

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5386535 A	DE	69021696 T2	29-02-1996
	EP	0430727 A1	05-06-1991
	JP	1837484 C	11-04-1994
	JP	3212726 A	18-09-1991
	JP	5050012 B	27-07-1993

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82